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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,340	09/04/2003	Grigori Lishanski	423.008	6105

23598 7590 03/20/2007
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EXAMINER

GILLAN, RYAN P

ART UNIT	PAPER NUMBER
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3746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/655,340		LISHANSKI ET AL.	
	Examiner		Art Unit	
	Ryan P. Gillan		3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/5/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action has been made Non-Final due to new grounds of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7-10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Lishanski et al. (6,364,622). Lishanski et al. teach a vibratory pump comprising: a housing (6, integral with the generator housing 10), a vibration generating mechanism (10) disposed within the housing; a pumping chamber (2) disposed within the housing adjacent the vibration generating mechanism (clearly seen in figure 1), the pumping chamber including at least one fluid inlet (24) and a fluid outlet (34) each extending through the housing; and a rod (9) operably connected to the vibration generating mechanism at one end and positioned within the pumping chamber at the opposite end (clearly seen in figure 1), the opposite end selectively engageable with the fluid outlet during operation of the vibration generating mechanism (col. 3 lines 1-17); the fluid outlet includes an outlet chamber (within 25 and 35) having an inner end positioned within the housing and including a central opening (clearly seen in figure 2), and an outer end (34) extending outwardly from the housing; wherein the central opening has a conical surface (clearly seen on the outer surface of 35); wherein the rod includes a plate (29) opposite the vibration generating mechanism that is matable and

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engageable with the central opening (clearly seen in figure 2); wherein the plate is formed of a resilient material (inherently, any material has at least some degree of resiliency); wherein the plate is positioned within the outlet end (outlet chamber 25 is an integral with the plate, and thus part of the plate, and is clearly seen in figure 2); wherein the plate includes a central portion (31) having a diameter less than the diameter of the central opening and an outer portion (30) having a diameter greater than the diameter of the central opening; wherein the outer portion includes a sealing member (23) that is sealingly engageable with the inner end of the outlet chamber; wherein the vibration generating mechanism includes a switch extending through the housing (col. 1 lines 20-27, although a switch extending through the housing is not specifically called out it is inherently disclosed in that the power source and motor are completely enclosed in the housing as seen in figure 1 and therefore the switching off of the power would require a switch extending through the housing).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. (6,364,622) in view of Lishanski et al. (6,428,289). Lishanski (6,364,622) teaches all of the claim limitations as applied to claim 2, but fails to teach the inner end including

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a resilient diaphragm positioned over the central opening, the diaphragm including a central aperture or opening.

5. Lishanski (6,428,289) teaches an inner end including a resilient diaphragm (250) positioned over the central opening (clearly seen in figure 1), the diaphragm including a central aperture or opening (260). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lishanski (6,604,920) to incorporate the diaphragm assembly as disclosed in Lishanski (6,428,289) as a means of structurally simplifying the active pumping mechanism and creating more efficient flow from the inlet to the outlet, thus creating a more cost effective pump.

6. Claims 11-15, 17 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. (6,364,622) in view Pilolla et al. (4,938,384). Lishanski et al. teach all of the claim limitations as applied to claim 1, but fail to teach at least one inlet tube that extends outwardly from the housing; wherein the outlet tube is formed from a generally resilient material; wherein the one fluid inlet includes at least one fluid opening in the pump chamber aligned with the at least one inlet tube; wherein the housing includes an engagement member disposed on the housing that is engageable with a fluid-holding container; and wherein the engagement member is threaded.

7. Pilolla et al. teach at least one inlet tube (64) that extends outwardly from the housing (66); wherein the inlet tube is formed from a generally resilient material (any material is inherently resilient to at least some degree); wherein the one fluid inlet includes at least one fluid opening (clearly seen connected to tube 64) in the pump chamber aligned with the at least one inlet tube (clearly seen in figure 1); wherein the

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housing includes an engagement member (58) disposed on the housing that is engageable with a fluid-holding container (12); and wherein the engagement member is threaded (clearly seen in figure 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the inlet of Lishanski to accommodate the fluid-holding container as taught by Pilolla et al. as a means of supplying fluid to the pump in an easily regulated and measured amount (col. 2 lines 1-15).

8. Claims 18 and 19 rejected under 35 U.S.C. 103(a) as being unpatentable over Lishanski et al. (6,364,622) and Pilolla et al. (4,938,384) in view of Lishanski (6,428,289). The combination of Lishanski et al. (6,604,920) and Pilolla et al. teach all of the claim limitations as applied to claim 17, but fail to teach the inner end including a resilient diaphragm positioned over the central opening, the diaphragm (or gasket) including a central aperture or opening.

9. Lishanski (6,428,289) teaches an inner end including a resilient diaphragm (250) positioned over the central opening (clearly seen in figure 1), the diaphragm (or gasket) including a central aperture or opening (260). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lishanski (6,364,622) to incorporate the diaphragm assembly as disclosed in Lishanski (6,428,289) as a means of structurally simplifying the active pumping mechanism and creating more efficient flow from the inlet to the outlet, thus creating a more cost effective pump.

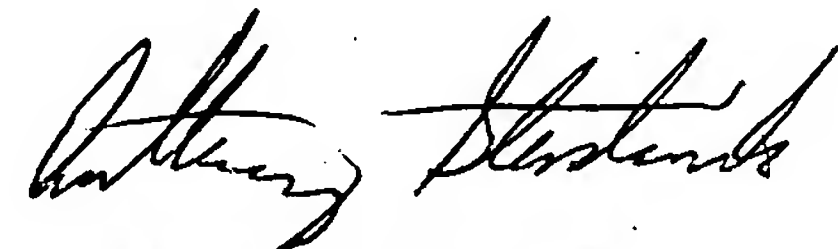
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan P. Gillan whose telephone number is 571-272-8381. The examiner can normally be reached on 8:30 am - 5:00 pm; Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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